2.4G内置天线
规格书

2.4G, 27*19mm,

RG1.13 线长 70mm, 1 代 ipex

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产品规格 Product Specification

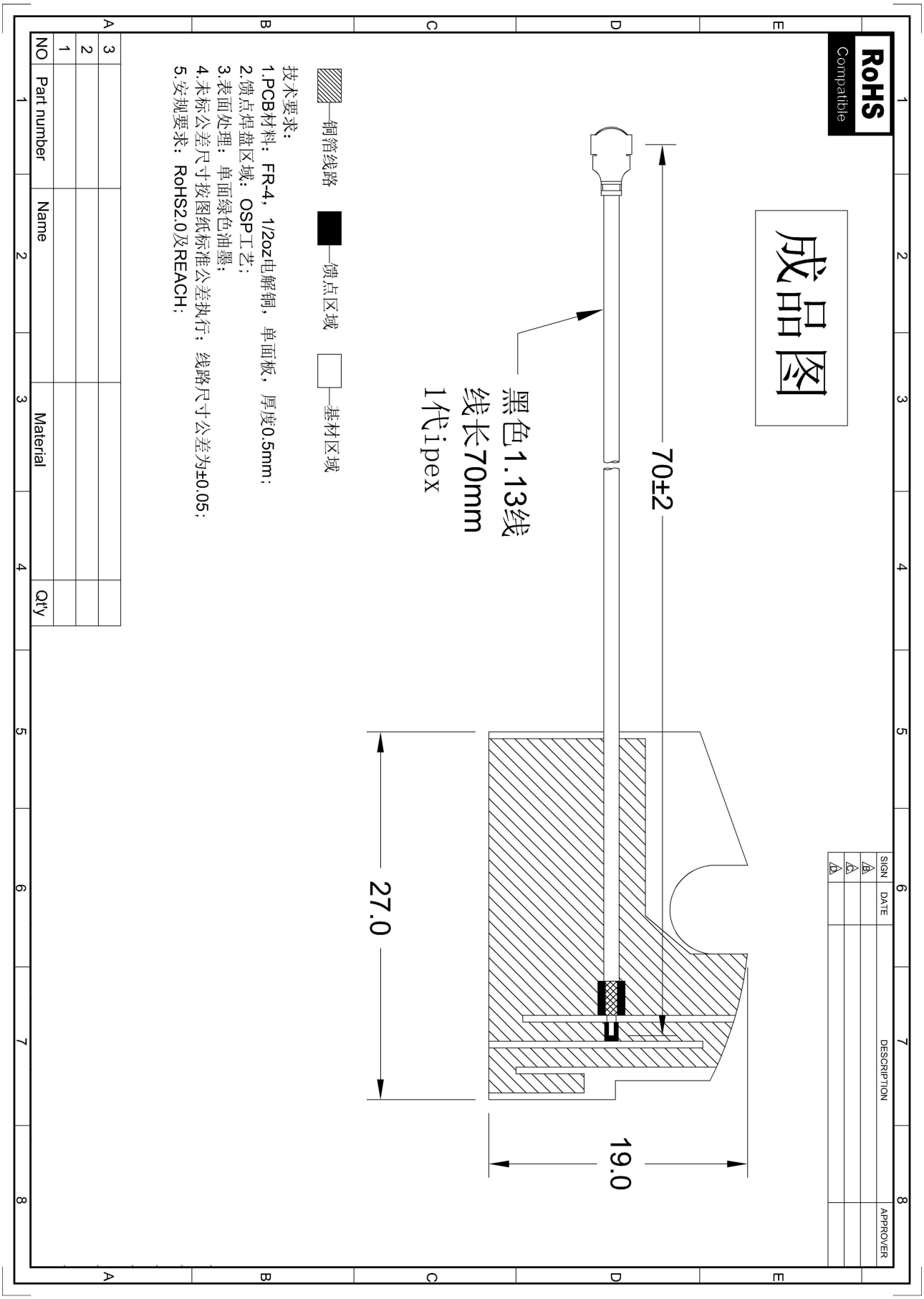
A. 电性能 Electrical Characteristics	
频率 Frequency	2400-2500MHz
电压驻波比 VSWR	< 2.0
效率 Efficiency	23%
增益 Peak Gain	-1 ~ 1.5dBi
阻抗 Impedance	50 Ohm
极化 Polarization	Linear
备注 Note	带机台测试
B. 材料&物理性能 Material & Mechanical	
射频材料 Material of Radiator	Cu
接头类型 Connector Type	黑色 RG1.13 线, L=70mm, 1 代 ipex
天线尺寸 Dimension	27 x 19 mm
C. 环境 Environmental	
工作温度 Operation Temperature	- 40˚C ~ +75 ˚C
存放温度 Storage Temperature	- 45˚C ~ +80 ˚C
湿度 Humidity	≤95%

D. 产品照片 Photo

可靠性测试 Reliability Test

项目	测试条件	规格
储存环境	在没有指定的情况下测试温度、湿度、气压如下： 1.温度为-40℃~+85℃ 2.相对湿度为 45%-85% 3.气压为 86kpa-106kpa	电气机械性能正常
高低温试验	在 85℃与-40℃之间进行 5 次循环，然后在正常条件下 1-2H，检查外观质量。	尺寸应满足规定并应满足于机械、电气性能
耐恒定湿热实验	相对湿度 95±3%，试验温度：40℃.持续 2H 作用后， 试品取出后 5min 之内测定电气性能，试品在正常条 件下 1-2H，检查外观质量	尺寸应满足规定并应满足于机械、电气性能
振动试验	振频范围 10-55HZ，位移幅值：0.35MM，加速度幅值： 50.0M/S，扫频循环次数：30 次	电气机械性能正常
跌落试验	1m 高空跌落	电气机械性能正常
拉拔力测试	用推拉力计测试仪器测试其承受力度：≧1N	电气机械性能正常
耐电压	1.绝缘火花电压 1.5KV 2.护套火花电压 1.5KV 3.绝缘对护套耐电压 0.5KV	电气机械性能正常
衰减值	2.0(nominal) 1GHz 2.9(nominal) 2GHz 3.2(nominal) 2.4GHz 3.7(nominal) 3.0GHz 4.3(nominal) 4.0GHz 4.8(nominal) 5.0GHz 5.3(nominal) 6.0GHz	3.3dB/m (at20℃)

产品图纸Product Drawing:

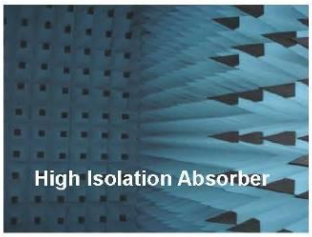


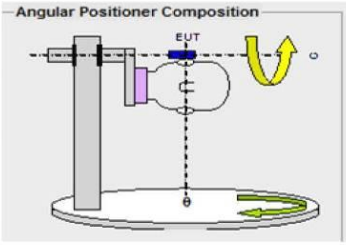
测试设备及条件Test Equipment & Conditions

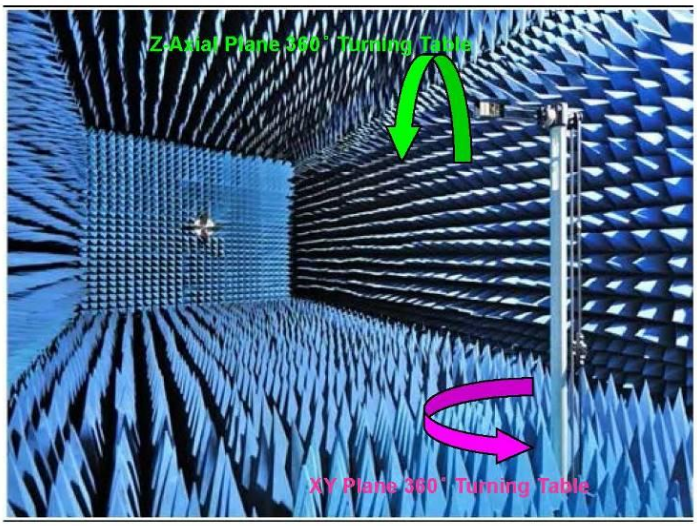
1、网络分析仪Network Analyzers： Keysight E5071C

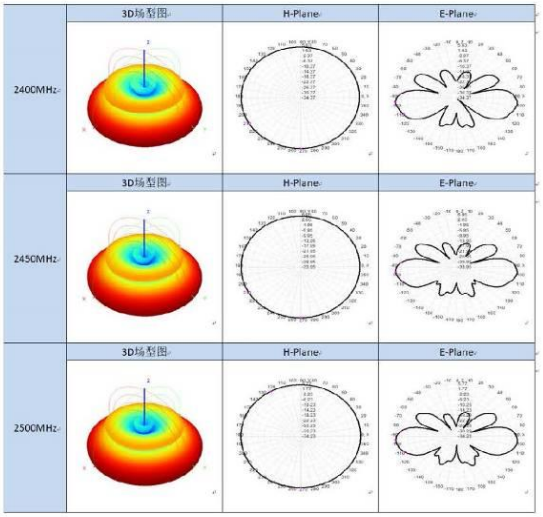
2、3D暗室测试系统 3D Chamber Test System

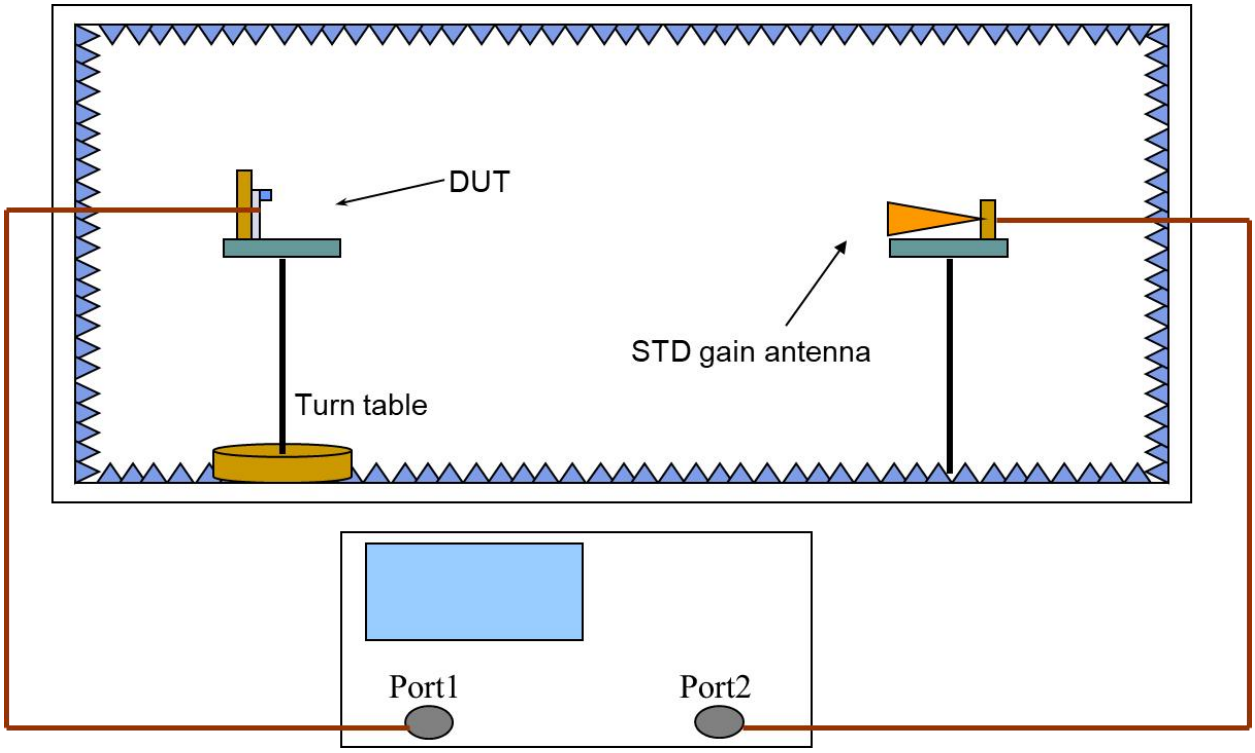
.Chamber Size: 9 x 5 x 4 m³
.Freq. Range: 0.4 ~ 18.0 GHz
.Double Ridge Horn Antenna
.VNA: Agilent E5071C
.3D Turning Table and Positioner
.ADT Solution 3D Testing Software



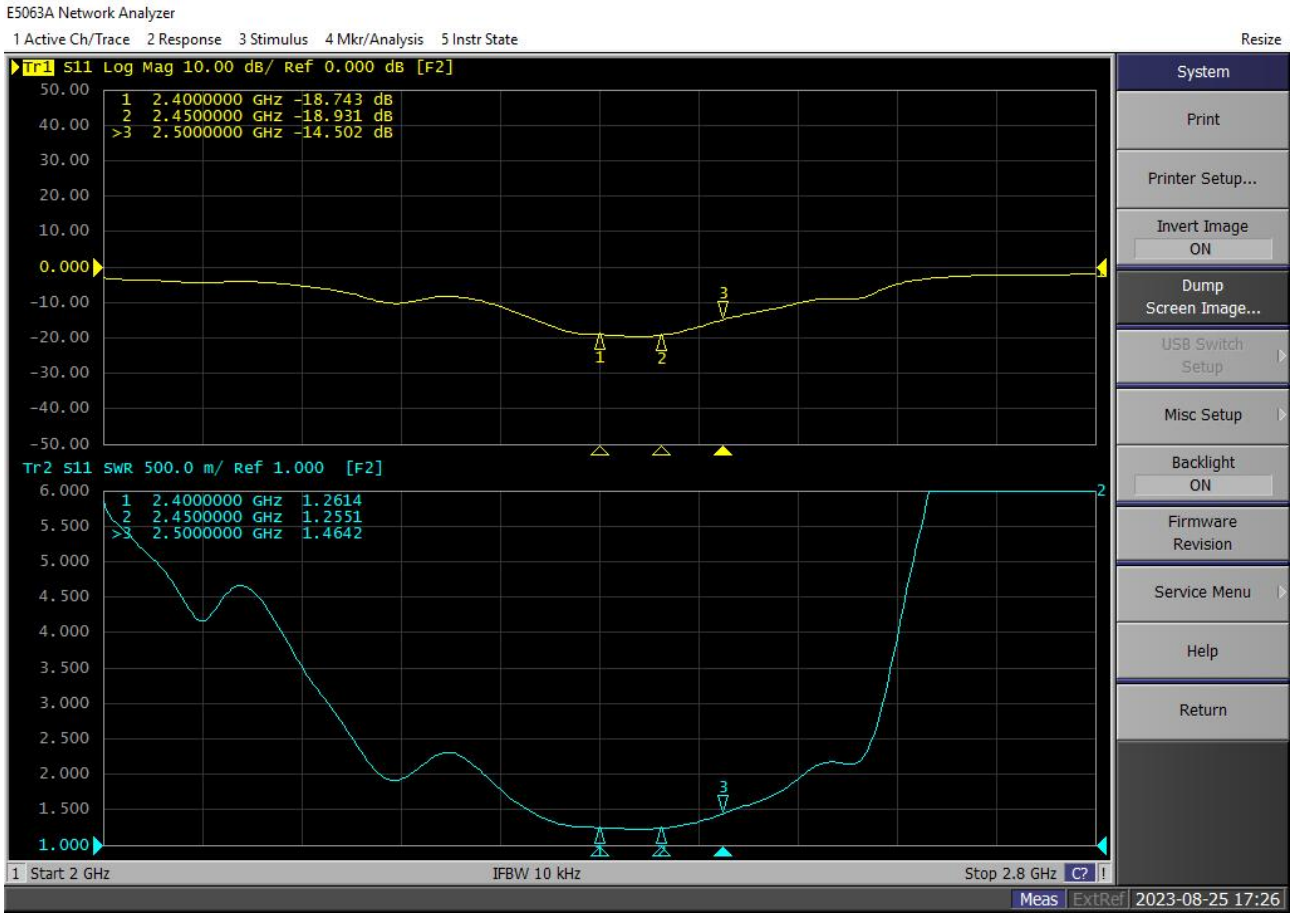








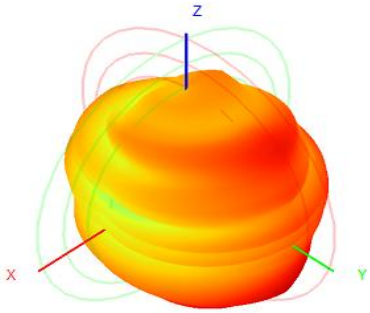
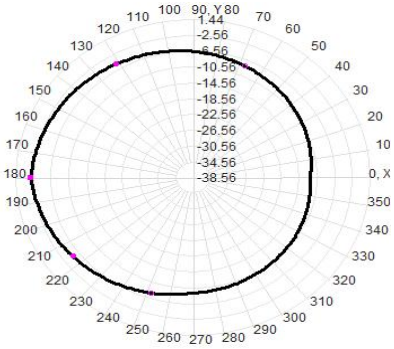
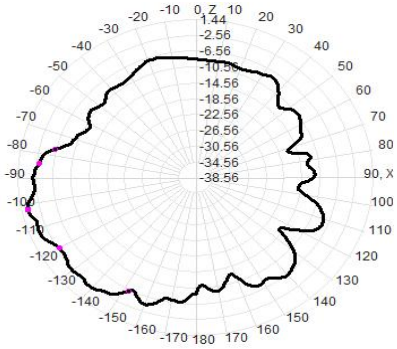
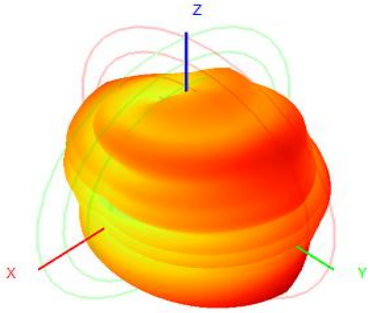
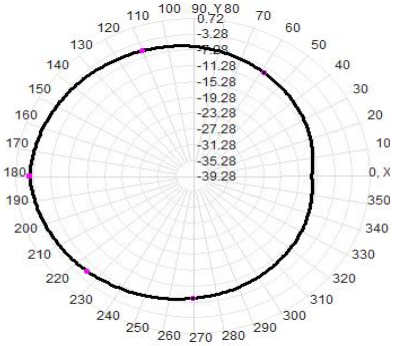
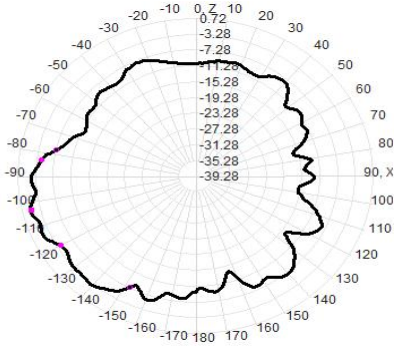
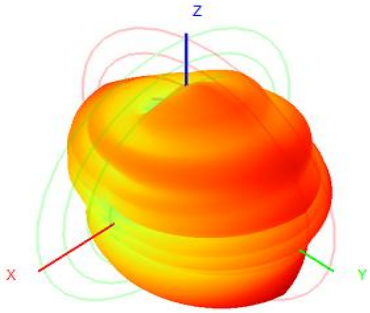
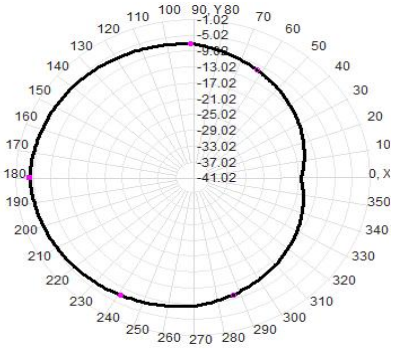
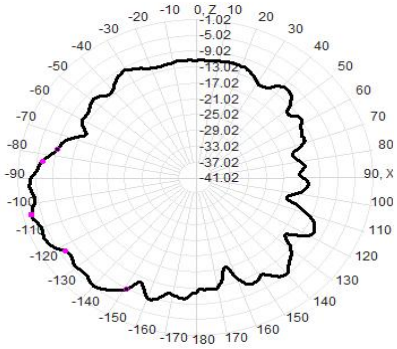
电压驻波比 **VSWR**


E5063A Network Analyzer
1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State
Resize
Tr1 S11 Log Mag 10.00 dB/ Ref 0.000 dB [F2]
1 2.4000000 GHz -18.743 dB
2 2.4500000 GHz -18.931 dB
>3 2.5000000 GHz -14.502 dB
Tr2 S11 SWR 500.0 m/ Ref 1.000 [F2]
1 2.4000000 GHz 1.2614
2 2.4500000 GHz 1.2551
>3 2.5000000 GHz 1.4642
System
Print
Printer Setup...
Invert Image
ON
Dump
Screen Image...
USB Switch
Setup
Misc Setup
Backlight
ON
Firmware
Revision
Service Menu
Help
Return
1 Start 2 GHz
IFBW 10 kHz
Stop 2.8 GHz
Meas
ExtRef
2023-08-25 17:26

效率&增益Total Efficiency& Gain:

Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	1.4	1.4	1.4	1.3	1.0	0.7	0.5	0.2	-0.3	-0.8	-1.0
Efficiency (%)	27.3	27.5	27.7	27.3	25.7	23.6	22.6	21.6	19.4	16.9	15.5

场型图

	3D	2D-水平面	2D-垂直面
2400MHz			
2450MHz			
2500MHz